ENVIRONMENTAL CONSERVATION
Contents of Volume 18, 1991

No. 1 — Spring 1991

Editorial Section:

Guest Editorial: *After Zero-growth?*, by Dr F. Raymond Fosberg .. 3–4

Editorial Comment: *A Future for Amazonia*, by Professor Richard E. Schultes 4–5

Guest Comment: *Biologists as Policymakers?*, by Professor Norman Myers 6

Updated Notice: *Index of Titles and Authors published in* Environmental Conservation *during 1974–86, with Supplement for 1987–88 and further ongoing Supplements* 2

Main Papers:

Conservation in Our Changing World, by Professor Ralph O. Slatyer 7–12

Global Environmental Education: Towards a Way of Thinking and Acting, by Professors William B. Stapp and Nicholas Polunin 13–18

History, Distribution, and Conservation, of Large Mammals and Their Habitats in Jordan, by Dr Alia Hatough-Bouran & Dr Ahmad M. Disi (13 figs & 3 tables) ..... 19–32 & 44

East Australian Rain-forest: A Case-study in Resource Harvesting and Conservation, by John F. Whitehouse (5 figs) 33–43

Attempted Understorey Characterization Using Aerial Photography in Kanha National Park, Madhya Pradesh, India, by Mahesh C. Porwal & Dr Parth S. Roy (9 figs and table) 45–50

Effects of Alien Plant Invasions on Native Vegetation Remnants on La Réunion (Mascarene Islands, Indian Ocean), by Ian A.W. Macdonald, Christophe Thébaud, Wendy A. Strahm & Dominique Strasberg (4 figs and 6 tables) 51–61

Final Statement of the Second World Climate Conference 62–6

Short Communications & Reports:

Native Conservation in a Northern Canadian Landscape, by Professor Colin B. Crampton 67–8

No-till Sweet Corn in Three-legumes' Cover-crops for Improved Productivity, by Ralph E. DeGregorio, Professor Richard A. Ashley & Dr John S. Barclay (table) 68–70

Recent Trends in United States Precipitation, by Dr Sherwood B. Idso & Professor Robert C. Balling (3 figs & table) 71–3

Air Traffic and Changing Climate, by Robert A. Egli ..... 73–4 & 44

Notes, News & Comments:

Plight of the Forests of Europe, by Hayo H. Hoekstra 43

Convention on Damage Caused to the Environment 44

The Foundation for Environmental Conservation: President's Report for the Year 1990, by Professor Nicholas Polunin..... 75–6

Hooke Park College to Encourage Small Timber-based Rural Industries, by John Makepeace [2 figs] 76–8

'Men of The Trees' in Western Australia, by Christopher B. Fyfe ... 78–9

The Oleg Polunin Memorial Fund, by Martyn Lloyd 79–80

Marine Debris and Fishing off Irian Jaya, by Anne D. Nash 80

Contaminants in the Environment, by Professor Aristeo Renzoni ... 80

Conferences & Meetings: Reports by Professor Roger H. Charlier, Howard L. Ferguson, Dr Asit K. Biswas, Professor Nicholas Polunin, Margaret R. Biswas, Dr Richard Gordon Miller; **Important Prospects** by Dr Michael F. Goodchild and Andrew Gouldson 81–6

Reviews & Notices: Reviews by Dr Arthur H. Westing, Professor Samir I. Ghabbour (2), Professor Gordon J.F. MacDonald, Dr Arthur H. Purcell, Dr Ronald W.J. Keay, Professor Lynton K. Caldwell, and Professor Raoul C. Mitchell-Thomé 87–92

Other Books etc. Received during 1990 93–6

No. 2 — Summer 1991

Editorial Section:

Opening Address by the President of the Swiss Confederation at the Inauguration of the International Academy of Environment, by HE Flavio Cotti 97–8

World Environment Day Speech of President of Brazil, by HE Fernando Collor 99–100

Editorial Comment: *UNCED 1992 and its Need of a Mountain Agenda*, by Peter B. Stone 100–1

Very Important Prospect: *United Nations Conference on Environment and Development*, by Maurice F. Strong 102

Notice: *Foundation Awards Committee: 'Best Paper' Prize(s) for 1990* 110

Draft Announcement of Biosphere Day, by Nicholas Polunin 118

Main Papers:

Modernization versus Sustainability: Disintegrating Village Agro-ecocomplexes in the Dry Zone of Sri Lanka, by Dr Rohana Ulluwishewa (5 figs) 103–9

Fisheries Development and Resource-usage Conflict: A Case-study of Deforestation Associated with the Lake Chad Fishery in Nigeria, by Arthur E. Neiland & Dr J. Verinumbe (7 figs and 4 tables) 111–7

Use and Non-use Values in the Conservation of Ichkeul National Park, Tunisia, by David H.L. Thomas, Dr Fethi Ayache & Dr G. Edward Hollis (8 figs and 7 tables) 119–30

Solutions to the 'Tragedy of the Commons': Sea-urchin Management in St Lucia, West Indies, by Allan H. Smith & Professor Fikret Berkes (2 figs) 131–6

Fertilizer Use and Environmental Policy in Agriculture: A Socio-economic Study in Greece, by Ioanna N. Fanariotu & Dr Dimitrios G. Skuras (4 tables) 137–42

Nitrogen and Phosphorus Removal-capacity of Four Chosen Aquatic Macrophytes in Tropical Freshwater Ponds, by Dr Brahma D. Tripathi, Jaya Strivastava & Kiran Misra (5 tables) 143–7

Philippine Tubbataha Reef National Marine Park: Status, Management Issues, and Proposed Plan, by Dr Alan T. White & Vergilio P. Palaganus (7 figs and 4 tables) ..... 148–57 & 136

Human Distance and Birds: Tolerance and Response Distances of Resident and Migrant Species in India, by Professors Joanna Burger & Michael Gochfeld (fig. and 7 tables) 158–65

Short Communications & Reports:

Bamboo Dieback: An Opportunity to Restore Panda Habitat, by Dr Alan H. Taylor, Donald G. Reid, Professor Qin Zisheng & Professor Hu Jinchu (4 figs and table) 166–8

Effects of Browsing by Elephants on Combretum-Terminalia *Woodland*, by Dr Hugo Jachmann & Tamara Croes (3 figs) ... 168–71

IIASA Study Forecasts Spread of Acidic Precipitation Effects in Europe Into Next Century, by Elisabeth Krippl 171–2

Design of Ecological Networks for Monitoring Global Change, by Dr Robert G. Bailey (3 figs) 173–5

Notes, News & Comments:

Joint Communiqué of Three Concerned Leaders, by President Fernando A. Collor of Brazil, Prime Minister Ingvar G. Carlsson of Sweden & UNCED Secretary-General Maurice F. Strong 176

1992 Earth Summit: What Role for Concerned Citizens?, by Julie I. Thompson 177

The Centre for Our Common Future and The 'Road to Brazil', by Warren H. Lindner 178–9

Global Environmental Conservation: Some General Aspects, by Nicholas Polunin 179–80

Forests in the European USSR, by Vassili Soukhikh 180–1

GEMI: Fostering Environmental Excellence by Business Worldwide, by Dr George D. Carpenter 181–2

Canadian Heritage Rivers System: Programme of the Latest 5 Years, by Michael W. Porter (map) 182

Conferences & Meetings:

Reports by Dr Christine Furedy, Professor John O'M. Bockris & Roger L. Egloff, Professor Roger H. Charlier, Roger L. Egloff, and Professor Colin Lacey. **Important Prospects** by Dr Sumner P. Wolsky, Gustav R. Grob, Waafas Ofosu-Amaah, Margret Hälker, Dr Brij Gopal, and Susan Pardey 183–8

Reviews & Notices:

Book Reviews by Senator Professor Mohamed Kassas, Dr Michael B. Usher, Dr Arthur H. Westing, Dr F. Raymond Fosberg, and Professor Gordon J.F. MacDonald; **Notice** of book by Mark K. Mitchell & Professor William B. Stapp. 189–92

ENVIRONMENTAL CONSERVATION
Contents of Volume 18, 1991

No. 1 — Spring 1991

Editorial Section:

Guest Editorial: *After Zero-growth?*, by Dr F. Raymond Fosberg .. 3–4

Editorial Comment: *A Future for Amazonia*, by Professor Richard E. Schultes 4–5

Guest Comment: *Biologists as Policymakers?*, by Professor Norman Myers 6

Updated Notice: *Index of Titles and Authors published in* Environmental Conservation *during 1974–86, with Supplement for 1987–88 and further ongoing Supplements* 2

Main Papers:

Conservation in Our Changing World, by Professor Ralph O. Slatyer 7–12

Global Environmental Education: Towards a Way of Thinking and Acting, by Professors William B. Stapp and Nicholas Polunin 13–18

History, Distribution, and Conservation, of Large Mammals and Their Habitats in Jordan, by Dr Alia Hatough-Bouran & Dr Ahmad M. Disi (13 figs & 3 tables) ..... 19–32 & 44

East Australian Rain-forest: A Case-study in Resource Harvesting and Conservation, by John F. Whitehouse (5 figs) 33–43

Attempted Understorey Characterization Using Aerial Photography in Kanha National Park, Madhya Pradesh, India, by Mahesh C. Porwal & Dr Parth S. Roy (9 figs and table) 45–50

Effects of Alien Plant Invasions on Native Vegetation Remnants on La Réunion (Mascarene Islands, Indian Ocean), by Ian A.W. Macdonald, Christophe Thébaud, Wendy A. Strahm & Dominique Strasberg (4 figs and 6 tables) 51–61

Final Statement of the Second World Climate Conference 62–6

Short Communications & Reports:

Native Conservation in a Northern Canadian Landscape, by Professor Colin B. Crampton 67–8

No-till Sweet Corn in Three-legumes' Cover-crops for Improved Productivity, by Ralph E. DeGregorio, Professor Richard A. Ashley & Dr John S. Barclay (table) 68–70

Recent Trends in United States Precipitation, by Dr Sherwood B. Idso & Professor Robert C. Balling (3 figs & table) 71–3

Air Traffic and Changing Climate, by Robert A. Egli ..... 73–4 & 44

Notes, News & Comments:

Plight of the Forests of Europe, by Hayo H. Hoekstra 43

Convention on Damage Caused to the Environment 44

The Foundation for Environmental Conservation: President's Report for the Year 1990, by Professor Nicholas Polunin..... 75–6

Hooke Park College to Encourage Small Timber-based Rural Industries, by John Makepeace [2 figs] 76–8

'Men of The Trees' in Western Australia, by Christopher B. Fyfe ... 78–9

The Oleg Polunin Memorial Fund, by Martyn Lloyd 79–80

Marine Debris and Fishing off Irian Jaya, by Anne D. Nash 80

Contaminants in the Environment, by Professor Aristeo Renzoni ... 80

Conferences & Meetings: Reports by Professor Roger H. Charlier, Howard L. Ferguson, Dr Asit K. Biswas, Professor Nicholas Polunin, Margaret R. Biswas, Dr Richard Gordon Miller; **Important Prospects** by Dr Michael F. Goodchild and Andrew Gouldson 81–6

Reviews & Notices: Reviews by Dr Arthur H. Westing, Professor Samir I. Ghabbour (2), Professor Gordon J.F. MacDonald, Dr Arthur H. Purcell, Dr Ronald W.J. Keay, Professor Lynton K. Caldwell, and Professor Raoul C. Mitchell-Thomé 87–92

Other Books etc. Received during 1990 93–6

No. 2 — Summer 1991

Editorial Section:

Opening Address by the President of the Swiss Confederation at the Inauguration of the International Academy of Environment, by HE Flavio Cotti 97–8

World Environment Day Speech of President of Brazil, by HE Fernando Collor 99–100

Editorial Comment: *UNCED 1992 and its Need of a Mountain Agenda*, by Peter B. Stone 100–1

Very Important Prospect: *United Nations Conference on Environment and Development*, by Maurice F. Strong 102

Notice: *Foundation Awards Committee: 'Best Paper' Prize(s) for 1990* 110

Draft Announcement of Biosphere Day, by Nicholas Polunin 118

Main Papers:

Modernization versus Sustainability: Disintegrating Village Agro-ecocomplexes in the Dry Zone of Sri Lanka, by Dr Rohana Ulluwishewa (5 figs) 103–9

Fisheries Development and Resource-usage Conflict: A Case-study of Deforestation Associated with the Lake Chad Fishery in Nigeria, by Arthur E. Neiland & Dr J. Verinumbe (7 figs and 4 tables) 111–7

Use and Non-use Values in the Conservation of Ichkeul National Park, Tunisia, by David H.L. Thomas, Dr Fethi Ayache & Dr G. Edward Hollis (8 figs and 7 tables) 119–30

Solutions to the 'Tragedy of the Commons': Sea-urchin Management in St Lucia, West Indies, by Allan H. Smith & Professor Fikret Berkes (2 figs) 131–6

Fertilizer Use and Environmental Policy in Agriculture: A Socio-economic Study in Greece, by Ioanna N. Fanariotu & Dr Dimitrios G. Skuras (4 tables) 137–42

Nitrogen and Phosphorus Removal-capacity of Four Chosen Aquatic Macrophytes in Tropical Freshwater Ponds, by Dr Brahma D. Tripathi, Jaya Strivastava & Kiran Misra (5 tables) 143–7

Philippine Tubbataha Reef National Marine Park: Status, Management Issues, and Proposed Plan, by Dr Alan T. White & Vergilio P. Palaganus (7 figs and 4 tables) ..... 148–57 & 136

Human Distance and Birds: Tolerance and Response Distances of Resident and Migrant Species in India, by Professors Joanna Burger & Michael Gochfeld (fig. and 7 tables) 158–65

Short Communications & Reports:

Bamboo Dieback: An Opportunity to Restore Panda Habitat, by Dr Alan H. Taylor, Donald G. Reid, Professor Qin Zisheng & Professor Hu Jinchu (4 figs and table) 166–8

Effects of Browsing by Elephants on Combretum-Terminalia *Woodland*, by Dr Hugo Jachmann & Tamara Croes (3 figs) ... 168–71

IIASA Study Forecasts Spread of Acidic Precipitation Effects in Europe Into Next Century, by Elisabeth Krippl 171–2

Design of Ecological Networks for Monitoring Global Change, by Dr Robert G. Bailey (3 figs) 173–5

Notes, News & Comments:

Joint Communiqué of Three Concerned Leaders, by President Fernando A. Collor of Brazil, Prime Minister Ingvar G. Carlsson of Sweden & UNCED Secretary-General Maurice F. Strong 176

1992 Earth Summit: What Role for Concerned Citizens?, by Julie I. Thompson 177

The Centre for Our Common Future and The 'Road to Brazil', by Warren H. Lindner 178–9

Global Environmental Conservation: Some General Aspects, by Nicholas Polunin 179–80

Forests in the European USSR, by Vassili Soukhikh 180–1

GEMI: Fostering Environmental Excellence by Business Worldwide, by Dr George D. Carpenter 181–2

Canadian Heritage Rivers System: Programme of the Latest 5 Years, by Michael W. Porter (map) 182

Conferences & Meetings:

Reports by Dr Christine Furedy, Professor John O'M. Bockris & Roger L. Egloff, Professor Roger H. Charlier, Roger L. Egloff, and Professor Colin Lacey. **Important Prospects** by Dr Sumner P. Wolsky, Gustav R. Grob, Waafas Ofosu-Amaah, Margret Hälker, Dr Brij Gopal, and Susan Pardey 183–8

Reviews & Notices:

Book Reviews by Senator Professor Mohamed Kassas, Dr Michael B. Usher, Dr Arthur H. Westing, Dr F. Raymond Fosberg, and Professor Gordon J.F. MacDonald; **Notice** of book by Mark K. Mitchell & Professor William B. Stapp. 189–92

No. 3 — Autumn 1991

Editorial Section:

Editorial: *Rays of Hope for Planet Earth and Even Its Biosphere* 193–6

Background Statement of Global Project: *Human-caused Soil-ecological Changes and Their Effect on The Biosphere*, by Vera A. Dmitrieva, Professors Victor A. Kovda, Nicholas Polunin & Dr Yakob A. Pachepsky 197

Editorial Comment: *Plants Do Not Respect Political Boundaries*, by Professor Richard Evans Schultes 198

Declaration of Biosphere Day 199

Biosphere Day: *A Half-dozen Chosen Prior Reactions*, by Nicholas Polunin 200

Updated Notice: *Index of Titles and Authors published in* Environmental Conservation [1974–] 210

Main Papers:

Tourism, Environment, and Sustainable Development, by Professor Richard W. Butler (fig. and 2 tables) 201–9

A Theoretical Basis for Managing Environmentally Sensitive Areas, by Michael D. Jennings & Dr John P. Reganold (7 figs and 3 tables) 211–8

Environmentally-sensitive Area Planning in Ontario: Status and Problems in Implementation, by Tove Rasmussen & Professor George G. Mulamoottil (4 figs and 3 tables) 219–27

Environment and Development: Attitudinal Impediments to Policy Integration, by Dr Robert J. P. Gale (4 tables and appendix) ... 228–36

Environmental Economics: Can Economics Help Mother Earth?, by Dr W. Douglass Shaw 237–42

Reducing Air Pollution from Electric Power-generation in China, by Zhiyong Wang (3 tables) 243–8

Accumulation of Fishing Debris, Plastic Litter, and Other Artefacts, on Heard and Macquarie Islands in the Southern Ocean, by David J. Slip & Harry R. Burton (5 figs and 3 tables) 249–54

Problems Related to Conservation of Coniferous Forest in Norway, by Dr Harald Korsmo (3 figs and 2 tables) 255–9

Short Communications & Reports:

Reorganization of British Nature Conservation, by Dr E. Barton Worthington 260–3

Hawaii Conservation Biology Initiative, by Dr F. Raymond Fosberg 263–4

Ethnobotany and Technology in the North-west Amazon: Example of a Partnership, by Professor Richard Evans Schultes 264–7

Bio-geochemical Aspects In and Around a Sewage Farm at Tirupati, Andhra Pradesh, India, by Drs M. Janardhana Raju, B. Kotaiah & T. V. Krishna Reddy (fig. and 3 tables) 267–9

Using Birds of Prey as an Environmental Conservation Tool: The Peregrine Fund's World Programme, by Dr Richard T. Watson 269–70

Notes, News & Comments:

Passing of the Environmental Torch, by H.E. President Fernando Collor 271–2

The Global Harmony Foundation, by Dr Naseeb H. Dajani 273

Sustainable Development Through People's Participation in Resource Management, by Adrienne Cruz 274

Scientists' Institute for Public Information: Global Change Program, by Roshi Pelaseyed 274–5

Royal Leadership and Awards for the Ageing, by Enid Irving 275

Circumpolar 'Ecosystem' in Winter, by Peter A. Scott 275–6

Ecological Research at the Indian Institute of Science: An Overview, by Dr R.J. Ranjit Daniels 276–7

USSR Becomes IUCN's Fifty-fourth Nation-state Member, by Elizabeth Hopkins 277

Leading Champions of Wildlife Lost to Dastardly Acts, by Dr Gunavant M. Oza 277–8

MSc in Conservation Biology, FitzPatrick Institute, University of Cape Town, South Africa, by Dr Amanda T. Lombard 278

Conferences & Meetings:

Reports by Thomas S. Davis, Dr Christine Furedy, P.H.C. ('Bing') Lucas, Dr Asit K. Biswas, and Professor Roger Charlier. **Important Prospects** by Paula Munsie, Rosalind Harris, Veronique Plocq, and Peter A. Scott 279–84

Reviews & Notices:

Book Reviews by Dr F. Raymond Fosberg, Dr Philip B. Thresher, Dr Michael B. Usher, and Timothy Cloudsley 285–8

No. 4 — Winter 1991

Editorial Section: [Stressing Clean Energy]

Introduction: Background and Objectives of the World Clean Energy Conference, by President Gustav R. Grob 289

Main Points in Opening Address by German Federal Minister of the Environment, Nature Protection, and Nuclear Safety, by HE Professor Dr Klaus Töpfer 290–2

Further Statement at Opening of World Clean Energy Conference, by Professor G.O. Patrick Obasi, Secretary-General of WMO ... 293–4

Request Statement: Energy and The Biosphere, by Nicholas Polunin 294

The World Energy Coalition and the Global Energy Charter, by Dr Hari N. Sharan & President Gustav R. Grob 295–6

Updated Notice: Index of Titles and Authors published in Environmental Conservation *during 1974–86, with ongoing Supplements* 356

Main Papers:

Man-induced Global Change of Climate: The IPCC Findings and Continuing Uncertainty Regarding Preventive Action, by Professor Bert Bolin (6 figs and 2 tables) 297–303

Solar–Hydrogen Energy System: The Choice of the Future, by Professor T. Nejat Veziroglu & Frano Barbir (5 figs and 12 tables) 304–12

The MINK Project: A New Methodology for Identifying Regional Influences of, and Responses to, Increasing Atmospheric CO_2 and Climate Change, by Dr Norman J. Rosenberg & Dr Pierre R. Crosson (fig. and 3 tables) 313–22

A Methodology for Assessment of External Issues Facing National Parks, with an Application in Costa Rica, by Dr John Schelhas (5 figs) 323–30

Australia's Distinctive National Parks System, by Dr Geoffrey Charles Wescott (map and 3 tables) 331–40

Competing for Water on the Indus Plain: Is There a Future for Pakistan's River Dolphins?, by Randall R. Reeves, Dr Abdul Aleem Chaudhry & Umeed Khalid (3 figs and 2 tables) 341–50

The St Lawrence Beluga: A Concerted Effort to Save an Endangered Isolated Population, by Jacques Prescott (2 figs) 351–5

Short Communications & Reports:

Substance of Keynote Address to World Clean Energy Conference, by Hermann Scheer, MP 357–8

Conclusions of the World Clean Energy Conference, Geneva, 4–7 November 1991, by President Gustav R. Grob 359

British Nature Conservancy Council: Final Report, by Dr E. Barton Worthington 359–60

Climate Scenarios for Alpine Regions: A Collaborative Effort between ICALPE and ProClim, by Dr Martin Beniston & Martin F. Price (2 figs) 360–3

Vegetational Boom or Bust in Arid Australia, by Professor John L. Cloudsley-Thompson (2 figs) 363–4

Protected Areas and Biodiversity: How the IVth Parks Congress Will Contribute, by Jeffrey A. McNeely ..... 364 & 372

Notes, News & Comments:

Shijun Ma (1915–91), by Goming Jiang, Hongchang Li & Nicholas Polunin (portrait) 365

A Tiny Paradise of Nature, by Jeanette Dür-Lindt (3 figs) 366–7

The St Sorny Nature Demonstration Reserve in Southern France, by Alfred Necker & Nicholas Polunin (fig.) 367

Ariankavu Pass, a Lost Elephant Corridor in South India, by Dr A.J.T. Johnsingh, S. Sathyakumar & S.F. Wesley Sunderraj (fig.) 368

Heritage Resources Centre, by Professor J. Gordon Nelson & Rafal Serafin 369

The Banff Centre for Management's Recent or Impending Initiatives in Environmental Innovation, by Felicity Edwards 369–70

Trees and Soil Stabilization, by John Rawnsley 371

Future of the Forestry Work-force, by Dean George Brown 371

UNEP and Canon's International Photographic Competition 'Focus on Your World', by Tore J. Brevik 371–2

Conferences & Meetings: Reports by UN/ECE, John C. Payne & Dr Susan K. Jacobson, and Dr Gunavant M. Oza; **Important Prospects** by Club de Bruxelles, Jeffrey A. McNeely, Dr Guido Van Steendam, Dr Roger H. Charlier, and Dr Dennis Thompson 373–8

Reviews & Notices: Reviews by Dr Arthur H. Westing, Professor John L. Cloudsley-Thompson, Dr Nicolai N. Smirnov, and Professor Richard Evans Schultes 379–81

Environmental Conservation: Contents of Volume 18, 1991 382–3

Environmental Conservation: Index of Named Contributors to Volume 18 384